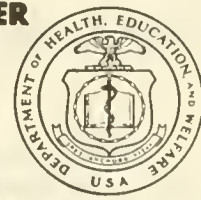


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COMMUNICABLE DISEASE CENTER

# Morbidity and Mortality



Vol. 15, No. 42

WEEKLY  
REPORT

Week Ending  
October 22, 1966

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE

EPIDEMIOLOGIC NOTES AND REPORTS  
MEASLES - Paterson, New Jersey

Only 109 cases of measles were reported in Paterson, New Jersey (population 147,490) during 1965. This was the smallest total in recent years and far below the average of 1,084 cases per year reported for 1960 through 1964. Due to a change in reporting, complete data on measles incidence are lacking for the first half of 1966.

Although measles incidence in Paterson during August and September 1966 was seasonally low, it has increased markedly in October. To date, 37 cases have been reported this month, 34 of which are in students attending 8 of the 43 public and parochial elementary schools in the city.

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Representatives of the Paterson Board of Education, of the City and State Health Departments, and of the local Community Action Program are conducting a measles susceptibility survey in 20 schools in the core area of the city. Plans for an immunization program through the

*(Continued on page 358)*

CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	42nd WEEK ENDED		MEDIAN 1961 - 1965	CUMULATIVE, FIRST 42 WEEKS		
	OCTOBER 22, 1966	OCTOBER 23, 1965		1966	1965	MEDIAN 1961 - 1965
Aseptic meningitis	59	58	61	2,453	1,735	1,717
Brucellosis	3	4	4	201	198	336
Diphtheria	5	4	8	156	122	213
Encephalitis, primary:						
Arthropod-borne & unspecified	58	68	---	1,778	1,540	---
Encephalitis, post-infectious	9	2	---	630	574	---
Hepatitis, serum	37	698	744	1,128	27,465	35,061
Hepatitis, infectious	680			25,713		
Measles (rubeola)	633	784	981	192,121	243,982	391,530
Poliomyelitis, Total (including unspecified)	3	1	6	77	49	353
Paralytic	2	---	5	70	39	301
Nonparalytic	---	1	---	---	7	---
Meningococcal infections, Total	46	39	43	2,897	2,501	1,937
Civilian	46	34	---	2,616	2,314	---
Military	---	5	---	281	187	---
Rubella (German measles)	244	---	---	42,816	---	---
Streptococcal sore throat & Scarlet fever	6,619	6,160	5,395	339,279	316,951	273,991
Tetanus	7	4	---	159	214	---
Tularemia	3	3	---	139	208	---
Typhoid fever	11	16	14	319	354	445
Typhus, tick-borne (Rky. Mt. Spotted fever)	---	2	---	223	245	---
Rabies in Animals	57	71	58	3,344	3,567	3,097

NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax	5	Botulism	8
Leptospirosis: Tex-1	54	Trichinosis	84
Malaria: Calif-6, Fla-2, Ga-1, Ind-1, Kan-1, Mass-3, NYC-1, NC-2, Ore-2, Pa-7	360	Rabies in Man:	2
Psittacosis	40	Rubella, Congenital Syndrome:	20
Typhus, murine: Mass-1	24	Plague:	4

## MEASLES – Paterson, New Jersey (Continued)

schools have been formulated in case a high percentage of measles-susceptible children in kindergarten through third grades is found.

A free community-wide immunization clinic for indigent preschool children and others living outside the core area will be conducted on October 30. An intensive publicity campaign is underway to encourage non-indigent

parents to have their children immunized by their private physicians.

(Reported by Dr. J. Allen Yaeger, Director, Paterson Board of Health; Dr. William J. Dougherty, Director, Division of Preventable Diseases, New Jersey Health Department; and an EIS Officer.)

CURRENT TRENDS  
MEASLES – 1966

During the 42nd week (ending October 22, 1966), 633 measles cases were reported, a decrease of 48 cases over the preceding week. The 41st and 42nd weeks represent the first 2 weeks of the current epidemiologic year.\* For the comparable weeks in 1965, totals of 872 and 782 measles cases were reported.

Counties reporting measles during the 41st week (ending October 15, 1966) are shown in Figure 1. In the District of Columbia and the 42 States for which information is available, only nine counties reported 10 or more cases of measles (Table 1). Together these nine counties contributed 262 of the 681 cases reported during the 41st week.

(Reported by the Childhood Viral Diseases Unit, Epidemiology Branch, CDC.)

## Editorial Note:

Data for county distribution of measles are available through the cooperation of State Epidemiologists. Maps

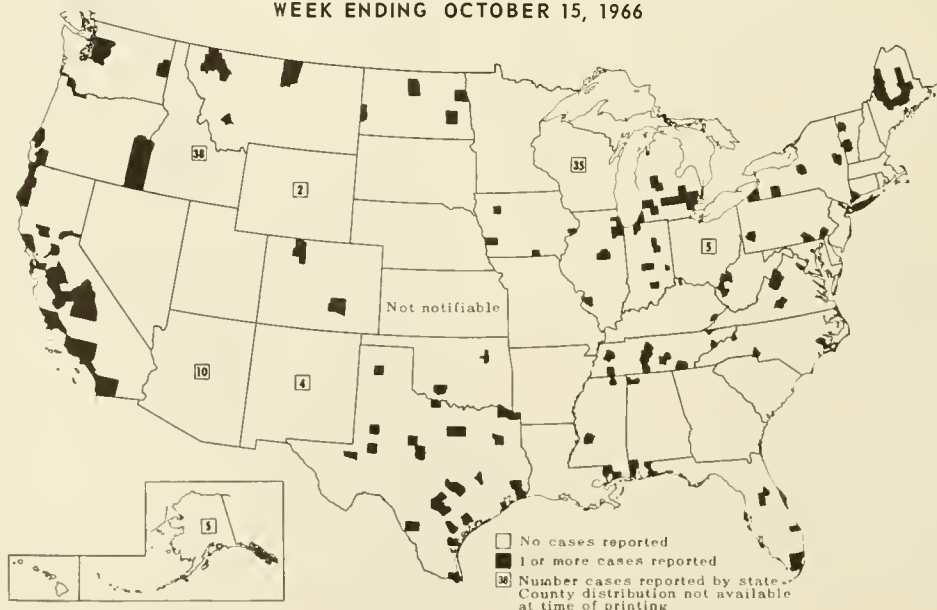
\*The current epidemiologic year for measles started with week 41 beginning October 9, 1966, and will close with week 40 ending October 7, 1967.

and analysis of county data will be included as a regular feature in MMWR in order to draw attention to areas where prompt and effective epidemic control programs, such as those described in previous issues of MMWR (Vol. 14, Nos. 42, 44, 48 and Vol. 15, Nos. 3, 6, 7, 8, 9), could be expected to terminate outbreaks.

Table 1  
Nine Counties with Highest Incidence of  
Reported Measles for Week Ending October 15, 1966

Snohomish County, Washington .....	71
Nevada County, California .....	60
Rutland County, Vermont .....	25
Galveston County, Texas .....	24
Gibson County, Tennessee .....	21
Spokane County, Washington .....	19
Detroit City, Michigan .....	16
King County, Washington .....	15
Maury County, Tennessee .....	11
Total .....	262

Figure 1  
COUNTIES OR HEALTH DISTRICTS REPORTING MEASLES  
WEEK ENDING OCTOBER 15, 1966



# EPIDEMIOLOGIC NOTES AND REPORTS BOTULISM TYPE F - California

The outbreak of botulism in California traced to venison jerky (MMWR, Vol. 15, No. 41) has been presumptively identified as type F. Initially mice injected with an extract of the food were protected by both type E and type F antitoxin for 24 hours, but after 48 hours only mice protected with type F antitoxin were alive. In repeat tests, however, a fresh extract of the food killed all mice with typical symptoms of botulism within 18 hours except those receiving heated extract and those protected with type F antitoxin. Bacteriological studies of the food to identify and characterize the microorganism are in progress.

(Reported by the California State Department of Public Health Laboratory and the Anaerobic Bacteriology Laboratory, Laboratory Branch, CDC.)

## Editorial Note:

Cross neutralization between type F and type E, when type E antitoxin is in large excess, has been reported previously.<sup>1</sup> With final confirmation of the organism, this will become the second outbreak of type F botulism to be documented. The first outbreak was observed on the Danish Island of Langeland and involved homemade liver paste.<sup>2</sup> Among the five persons who ate the liver paste, three had severe attacks of botulism, one died and one had

no symptoms. The organism isolated from the liver paste was studied more extensively by Dolman and Murakami and designated as *Clostridium botulinum* type F.<sup>3</sup> The organism was first demonstrated in the United States by Eklund and Poysky in two different samples of marine sediments collected off the coast of California and Oregon.<sup>1</sup> Two additional demonstrations have been made from marine sediments recently and pure cultures are being studied.<sup>4</sup> In addition, the organism was isolated from a salmon (*Oncorhynchus nerka*) taken from the Columbia River.<sup>5</sup>

## REFERENCES:

- <sup>1</sup>Eklund, M.W. and Poysky, F.: *Clostridium botulinum* type F from marine sediments. Science 149:306, 1965.
- <sup>2</sup>Moller, V. and Scheibel, I.: Preliminary report on the isolation of an apparently new type of *Clostridium botulinum*. Acta. Path. Microbiol. Scand. 45:80, 1960.
- <sup>3</sup>Dolman, C.E. and Murakami, L.: *Clostridium botulinum* type F with recent observations on other types. J. Infect. Dis. 109:107, 1961.
- <sup>4</sup>Eklund, M.W., Poysky, F., and Wieler, D.: Demonstration and isolation of *Clostridium botulinum* type F from the Pacific Coast of the United States. Presented at the Symposium in Moscow, Russia, July 1966.
- <sup>5</sup>Craig, J.M. and Pilcher, K.S.: *Clostridium botulinum* type F: Isolation from salmon from the Columbia River. Science 153: 311, 1966.

## REPORTED CASES OF POST-INFECTIOUS AND POST-IMMUNIZATION ENCEPHALITIS THIRD QUARTER ENDING OCTOBER 1, 1966 (WEEKS 27-39)

State	Mumps	Measles	Chickenpox	Other specified
Alaska .....		1		
California .....	17	9	6	
Connecticut .....	2			
Florida .....	10	1		
Illinois .....	9			Influenza-1
Iowa .....	1	3		
Kentucky .....	1			
Louisiana .....	1	1		
Massachusetts .....	5			
Michigan .....	12	6		Herpes-1
Minnesota .....	8	2		Influenza-3, Herpes-2
Montana .....	1			
New Hampshire .....	1			
New York, Upstate .....	6		1	
Pennsylvania .....	10	2	1	
Tennessee .....	3	1		Influenza-1, Herpes-1
Texas .....	4	2		Post-vaccinal-1
Vermont .....				Herpes Simplex-1
Virginia .....	2	1		
Washington .....	6	1	1	
Third Quarter Total				
1966 .....	99	30	9	
1965 .....	93	24	14	
Cumulative Total (weeks 1-39)				
1966 .....	343	159	70	
1965 .....	357	94	72	

### SURVEILLANCE SUMMARY 1965-1966 INFLUENZA SEASON

Between December 1965 and May 1966, the presence of influenza (type A and/or B) was identified clinically and epidemiologically in 49 of the 50 States. Laboratory confirmation was made in all but one State. As indicated in Table 2, strains of A<sub>2</sub> virus were isolated in 17 States and serologically confirmed in 12 others, while strains of B virus were isolated in 25 States and serologically confirmed in 16 others. Twenty-one States confirmed the presence of both types A and B. Those areas affected by both viruses usually experienced two waves of increased influenza activity, although occasionally both types occurred concurrently.

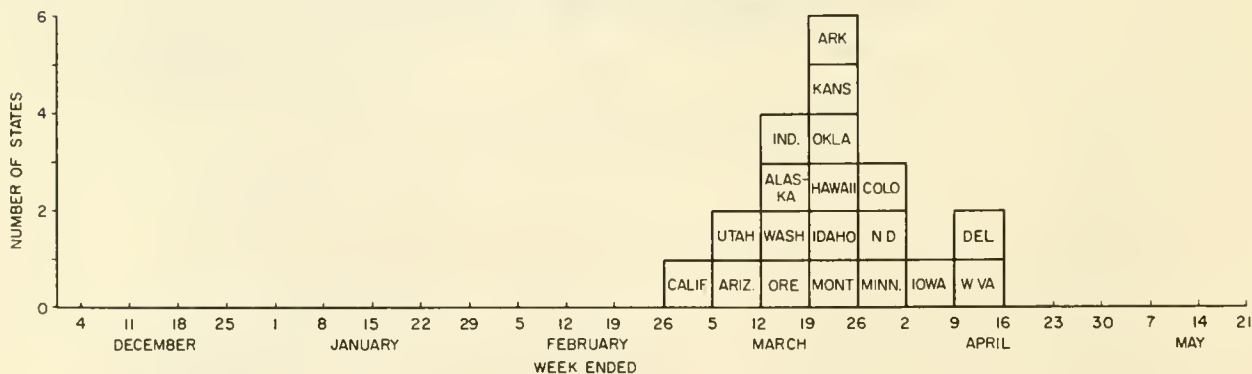
Influenza B, which appeared earlier than type A, was first recognized in the northeast area of the country; influenza A was first noted on the west coast (Figure 2). Each virus type then spread centrally from its initial focus, resulting in the widespread patterns of distribution noted in Figures 3 and 4.

Pneumonia influenza mortality reported to the Communicable Disease Center by 122 United States cities showed minor excursions above the epidemic threshold from mid-February to mid-May (Figure 5). The excess

mortality was contributed almost entirely by California; influenza mortality as indicated through school and industrial absenteeism, hospital admissions, and outpatient visits, reached levels not exceeded since 1960 when type A<sub>2</sub> influenza also occurred in the State. In general, other areas involved with type A<sub>2</sub> influenza experienced little excess mortality. In areas where type B virus was most widespread, school absenteeism without an equivalent rise in industrial absenteeism, hospital admissions, and excess mortality was noted, reflecting the younger age group more commonly involved.

Influenza viruses isolated during the 1965-66 season, of both type A<sub>2</sub> and B, appear to form relatively homogeneous groups when compared in reciprocal hemagglutination inhibition tests. Of major interest is the antigenic relationship of currently prevalent strains to the viruses which are used for the preparation of influenza virus vaccines. Of the two A<sub>2</sub> vaccine components (A<sub>2</sub>/Japan/170/62 and A<sub>2</sub>/Taiwan/1/64), all viruses isolated during the past season showed a close relationship to the former strain. Contemporary strains show a continued shift away from the antigenic make-up of A<sub>2</sub>/Japan/305/57, one of

Figure 2  
STATES REPORTING PREDOMINANT OR WIDESPREAD TYPE A  
BY WEEK OF PEAK INCIDENCE



STATES REPORTING PREDOMINANT OR WIDESPREAD TYPE B  
BY WEEK OF PEAK INCIDENCE

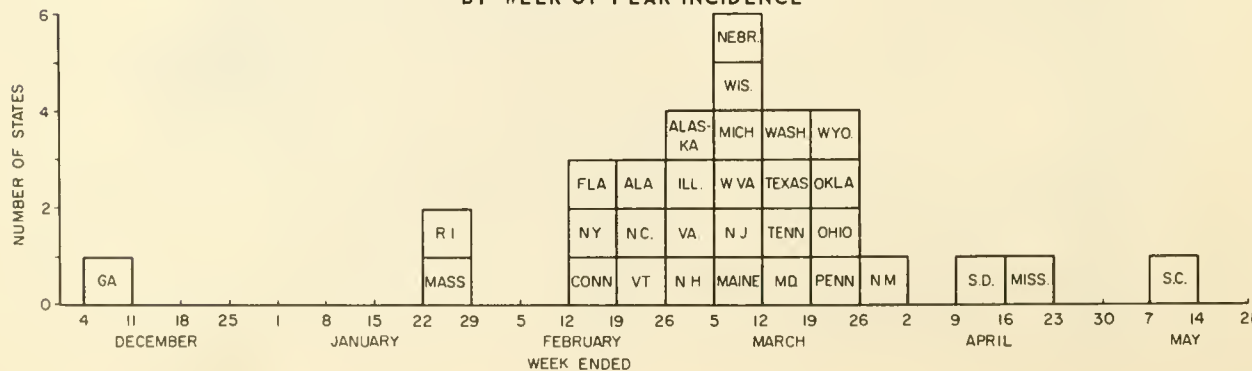




Table 2  
United States Influenza (Winter 1965-66) State Summary\*

Division State	Peak Occurrence	GEOGRAPHIC EXTENT**			Laboratory Confirmation	
					Isolation	Serology
NEW ENGLAND						
Massachusetts	Jan - late	.....	.....	Widespread B	B	B
Rhode Island	Jan - late	.....	.....	Widespread B	-	B
Connecticut	Feb - mid	.....	.....	Widespread B	B	B
Vermont	Feb - late	.....	.....	Widespread B	B	B
New Hampshire	Feb - late	.....	.....	Widespread B	-	B
Maine	Mar - early	.....	.....	Widespread B	B	B
MIDDLE ATLANTIC						
New York	Feb - mid	Isolated B	.....	.....	B	B
New Jersey	Mar - early	.....	Regional B	.....	B	B
(New York City)	Mar - late	Isolated A,B	.....	.....	A2, B	A
Pennsylvania	Mar - late	Isolated B	.....	.....	B	-
SOUTH ATLANTIC						
Georgia	Dec - early	Isolated A,B	.....	.....	B	A, B
Florida	Feb - mid	.....	.....	Widespread B	B	B
North Carolina	Feb - late	.....	Regional B	.....	-	B
Virginia	Feb - late	Isolated A	.....	Widespread B	B	A, B
W. Virginia	Mar - early	Isolated A	.....	Widespread B	-	A, B
Maryland	Mar - mid	Isolated B	.....	.....	B	-
(Washington, D.C.)	Mar - late	Isolated B	.....	.....	B	-
Delaware	Apr - mid	Isolated A	.....	.....	A2	-
South Carolina	May - mid	Isolated B	.....	.....	-	B
EAST NORTH CENTRAL						
Illinois	Feb - late	Isolated A	Regional B	.....	A2, B	A, B
Wisconsin	Mar - early	Isolated B	.....	.....	B	B
Michigan	Mar - early	Isolated A	Regional B	.....	A2, B	B
Indiana	Mar - mid	.....	Regional A	.....	-	A
Ohio	Mar - late	Isolated A,B	.....	.....	-	A, B
EAST SOUTH CENTRAL						
Alabama	Feb - late	Isolated B	.....	.....	-	B
Kentucky	Mar - mid	.....	Regional	.....	-	-
Tennessee	Mar - mid	Isolated A	Regional B	.....	B	A, B
Mississippi	Apr - mid	Isolated B	.....	.....	-	B
WEST SOUTH CENTRAL						
Texas	Mar - mid	Isolated A,B	.....	.....	A2	A, B
Oklahoma	Mar - late	.....	Regional A,B	.....	A2, B	A, B
Arkansas	Mar - late	Isolated A	.....	.....	-	A
Louisiana	Mar - late	Isolated A,B	.....	.....	A2, B	-
WEST NORTH CENTRAL						
Missouri	.....	.....	.....	.....	-	-
Nebraska	Mar - early	.....	Regional B	.....	B	B
Kansas	Mar - mid	Isolated A,B	.....	.....	A2	A, B
Minnesota	Mar - late	.....	Regional B	Widespread A	A2	A, B
North Dakota	Mar - late	Isolated B	.....	Widespread A	-	A, B
Iowa	Apr - early	.....	Regional A	.....	A2	-
South Dakota	Apr - mid	Isolated B	.....	.....	-	B
MOUNTAIN						
Arizona	Mar - early	.....	.....	Widespread A	-	A
Utah	Mar - early	Isolated A	.....	.....	A2	A
Nevada	Mar - mid	.....	Regional	.....	-	-
Idaho	Mar - late	Isolated B	.....	Widespread A	A2, B	A
Montana	Mar - late	Isolated B	.....	Widespread A	A2	A, B
Wyoming	Mar - late	Isolated B	.....	.....	-	B
Colorado	Mar - late	Isolated A	.....	.....	A2	A
New Mexico	Mar - late	Isolated A	Regional B	.....	-	A, B
PACIFIC						
California	Feb - late	Isolated B	.....	Widespread A	A2, B	A, B
Alaska	Mar - early	.....	.....	Widespread A,B	B	A, B
Washington	Mar - mid	.....	.....	Widespread A,B	B	A, B
Oregon	Mar - mid	.....	Regional B	Widespread A	A2, B	A, B
Hawaii	Mar - late	.....	.....	Widespread A	A2	A

\*Information from State Health Department Influenza Appraisal Summary, Research Institutions, University Centers and CDC Respiraviruses Laboratory

\*\*Terms: Isolated - influenza recognized in only a limited number of small, well-defined population units.

Regional - influenza recognized in counties comprising less than 50 percent of the State's population.

Widespread - influenza recognized in counties comprising more than 50 percent of the State's population.

## 1965-66 INFLUENZA SEASON - (Continued)

the first viruses isolated after the emergence of Asian influenza.

Type B viruses appear to be clearly distinguishable from the vaccine strain B/Maryland/1/59. As a group, the 1965-66 viruses appear closely related to the B/Colo-

rado/2/64 strain isolated during a limited outbreak of type B influenza in the United States in 1964.

(Reported by the Influenza-Respiratory Diseases Unit, Epidemiology Branch, CDC.)

Figure 3  
DISTRIBUTION OF INFLUENZA A - UNITED STATES - 1965-66

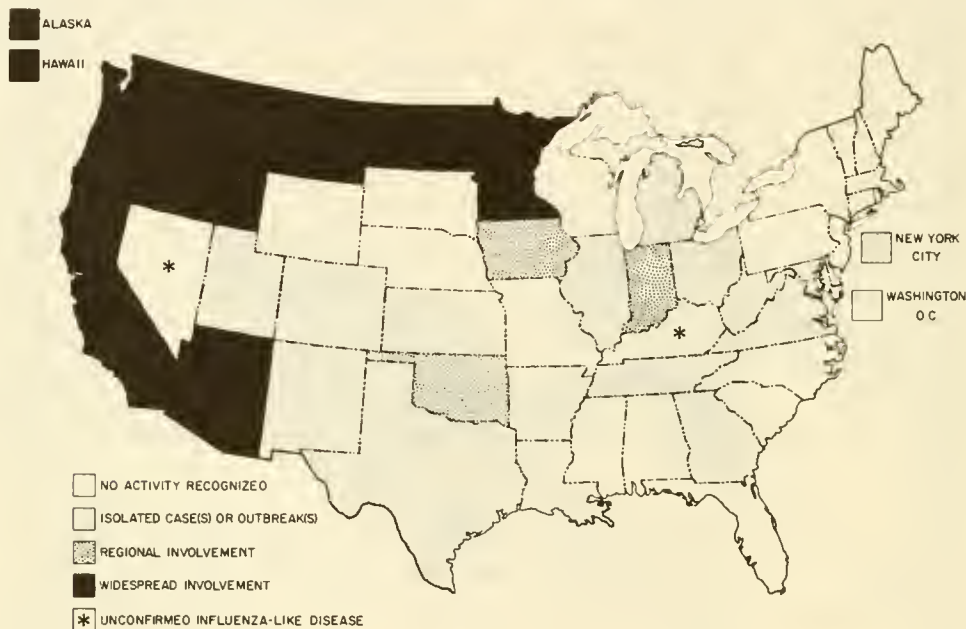


Figure 4  
DISTRIBUTION OF INFLUENZA B - UNITED STATES - 1965-66

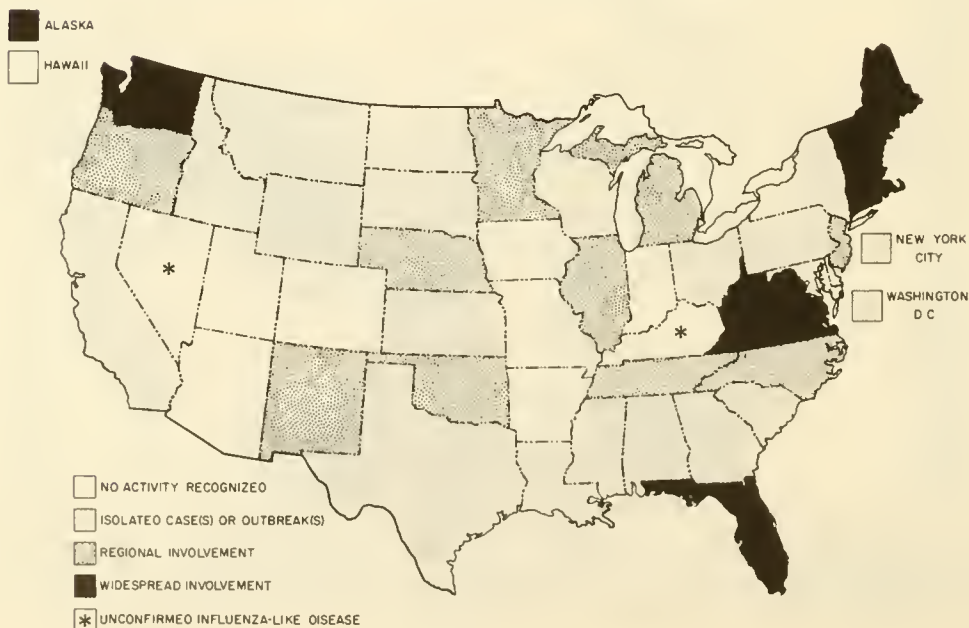
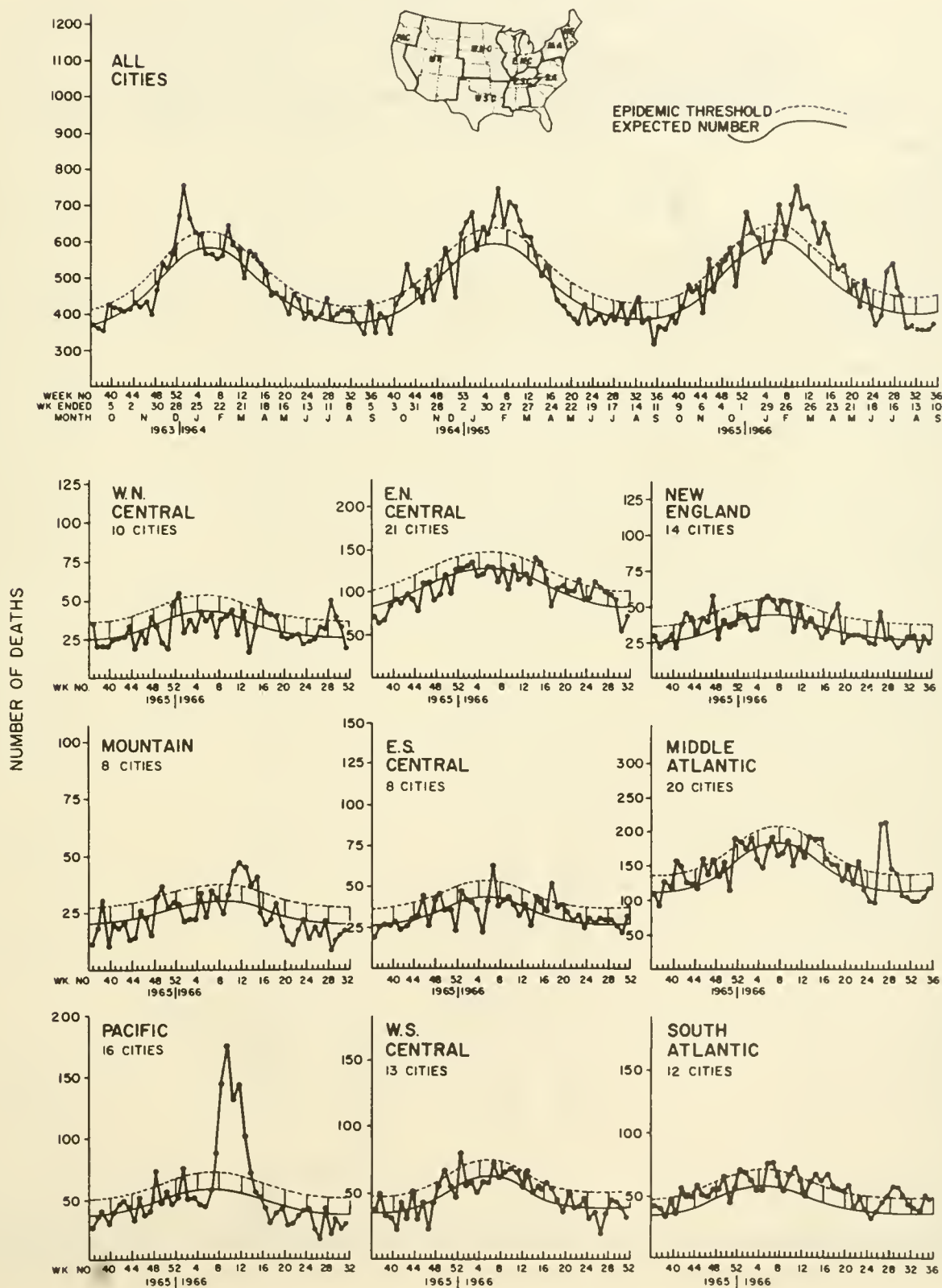


Figure 5  
PNEUMONIA-INFLUENZA DEATHS IN 122 UNITED STATES CITIES



FOR WEEKS ENDED

OCTOBER 22, 1966 AND OCTOBER 23, 1965 (42nd WEEK)

AREA	ASEPTIC MENINGITIS		BRUCELLOSIS	ENCEPHALITIS			DIPHTHERIA		HEPATITIS		
				Primary including unsp. cases		Post- Infectious			Serum	Infectious	Both Types
	1966	1965		1966	1965	1966	1966	1965			
UNITED STATES...	59	58	3	58	68	9	5	4	37	680	698
NEW ENGLAND.....	1	5	-	3	1	1	1	-	3	26	43
Maine.....	-	-	-	-	-	-	-	-	-	9	5
New Hampshire.....	-	-	-	-	-	-	-	-	-	3	-
Vermont.....	-	-	-	-	-	-	-	-	-	-	1
Massachusetts.....	1	2	-	2	1	1	1	-	1	7	18
Rhode Island.....	-	2	-	-	-	-	-	-	2	3	3
Connecticut.....	-	1	-	1	-	-	-	-	-	4	16
MIDDLE ATLANTIC.....	8	8	-	9	9	1	-	-	21	104	101
New York City.....	4	4	-	5	3	-	-	-	11	36	25
New York, Up-State.	1	1	-	1	1	-	-	-	3	25	20
New Jersey.....	1	3	-	2	3	-	-	-	6	17	29
Pennsylvania.....	2	-	-	1	2	1	-	-	1	26	27
EAST NORTH CENTRAL...	8	9	-	15	12	2	-	1	1	114	150
Ohio.....	2	1	-	12	5	-	-	-	1	27	50
Indiana.....	1	1	-	2	4	-	-	-	-	8	8
Illinois.....	2	5	-	-	1	1	-	1	-	22	10
Michigan.....	2	1	-	-	2	1	-	-	-	47	76
Wisconsin.....	1	1	-	1	-	-	-	-	-	10	6
WEST NORTH CENTRAL...	3	3	-	5	11	-	1	-	-	55	28
Minnesota.....	3	3	-	1	-	-	1	-	-	5	11
Iowa.....	-	-	-	-	4	-	-	-	-	13	2
Missouri.....	-	-	-	2	-	-	-	-	-	28	9
North Dakota.....	-	-	-	-	1	-	-	-	-	-	-
South Dakota.....	-	-	-	1	2	-	-	-	-	-	-
Nebraska.....	-	-	-	1	1	-	-	-	-	5	3
Kansas.....	-	-	-	-	3	-	-	-	-	4	3
SOUTH ATLANTIC.....	6	6	-	2	2	2	-	1	1	69	80
Delaware.....	1	1	-	-	1	-	-	-	-	1	8
Maryland.....	-	1	-	-	-	-	-	-	-	14	15
Dist. of Columbia..	-	-	-	-	-	-	-	-	-	2	2
Virginia.....	-	2	-	-	1	-	-	-	-	9	17
West Virginia.....	-	1	-	-	-	-	-	-	1	4	9
North Carolina.....	-	-	-	1	-	-	-	1	-	9	18
South Carolina.....	-	-	-	-	-	-	-	-	-	2	2
Georgia.....	-	-	-	-	-	-	-	-	-	7	-
Florida.....	5	1	-	1	-	2	-	-	-	21	9
EAST SOUTH CENTRAL...	7	5	1	5	-	-	2	-	-	38	51
Kentucky.....	-	-	-	-	-	-	-	-	-	8	17
Tennessee.....	5	1	1	4	-	-	-	-	-	19	20
Alabama.....	-	4	-	-	-	-	-	-	-	4	11
Mississippi.....	2	-	-	1	-	-	2	-	-	7	3
WEST SOUTH CENTRAL...	4	2	1	6	2	2	-	2	1	36	44
Arkansas.....	-	-	-	3	-	1	-	-	-	5	4
Louisiana.....	-	-	1	1	-	-	-	-	-	6	12
Oklahoma.....	-	-	-	-	-	-	-	-	-	2	1
Texas.....	4	2	-	2	2	1	-	2	1	23	27



## Morbidity and Mortality Weekly Report

365

CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDED  
OCTOBER 22, 1966 AND OCTOBER 23, 1965 (42nd WEEK) - CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			POLIOMYELITIS				RUBELLA
	1966	Cumulative		1966	Cumulative		Total		Paralytic		
		1966	1965		1966	1965	1966	1965	1966	Cumulative 1966	
UNITED STATES...	633	192,121	243,982	46	2,897	2,501	3	1	2	70	244
NEW ENGLAND.....	19	2,346	36,932	2	127	128	-	-	-	-	27
Maine.....	3	226	2,828	-	10	16	-	-	-	-	3
New Hampshire.....	-	80	382	-	9	7	-	-	-	-	1
Vermont.....	12	278	1,301	-	4	7	-	-	-	-	-
Massachusetts.....	1	789	19,315	1	51	46	-	-	-	-	10
Rhode Island.....	-	72	3,943	-	15	14	-	-	-	-	1
Connecticut.....	3	901	9,163	1	38	38	-	-	-	-	12
MIDDLE ATLANTIC.....	54	18,151	15,162	7	354	321	-	-	-	-	10
New York City.....	14	8,316	2,488	1	50	54	-	-	-	-	8
New York, Up-State.....	26	2,575	4,195	2	99	92	-	-	-	-	2
New Jersey.....	6	1,868	2,714	2	105	82	-	-	-	-	-
Pennsylvania.....	8	5,392	5,765	2	100	93	-	-	-	-	-
EAST NORTH CENTRAL...	103	69,156	56,581	8	459	364	1	-	-	3	79
Ohio.....	5	6,370	8,921	6	129	97	1	-	-	-	8
Indiana.....	9	5,743	1,998	-	80	45	-	-	-	1	8
Illinois.....	27	11,411	2,827	-	81	102	-	-	-	2	19
Michigan.....	36	14,636	26,695	1	122	78	-	-	-	-	12
Wisconsin.....	26	30,996	16,140	1	47	42	-	-	-	-	32
WEST NORTH CENTRAL...	27	8,771	16,714	3	154	128	-	1	-	1	12
Minnesota.....	2	1,645	705	1	35	29	-	-	-	1	3
Iowa.....	-	5,327	9,068	-	22	12	-	1	-	-	8
Missouri.....	2	535	2,600	2	60	52	-	-	-	-	-
North Dakota.....	23	1,147	3,773	-	11	11	-	-	-	-	1
South Dakota.....	-	40	115	-	5	3	-	-	-	-	-
Nebraska.....	-	77	453	-	8	10	-	-	-	-	-
Kansas.....	NN	NN	NN	-	13	11	-	-	-	-	-
SOUTH ATLANTIC.....	75	15,473	25,438	8	492	471	-	-	-	1	24
Delaware.....	3	260	506	-	4	9	-	-	-	-	-
Maryland.....	5	2,116	1,170	-	48	45	-	-	-	-	7
Dist. of Columbia..	-	384	78	1	14	9	-	-	-	-	2
Virginia.....	9	2,197	4,121	4	60	57	-	-	-	-	5
West Virginia.....	29	5,369	14,020	-	35	25	-	-	-	-	4
North Carolina.....	5	505	396	2	127	96	-	-	-	-	-
South Carolina.....	-	658	1,058	-	50	62	-	-	-	-	-
Georgia.....	-	234	617	-	63	58	-	-	-	1	-
Florida.....	24	3,750	3,472	1	91	110	-	-	-	-	6
EAST SOUTH CENTRAL...	15	19,862	14,207	1	251	193	-	-	-	3	3
Kentucky.....	-	4,736	2,714	1	89	77	-	-	-	-	2
Tennessee.....	14	12,398	8,026	-	85	61	-	-	-	-	1
Alabama.....	1	1,699	2,341	-	54	33	-	-	-	1	-
Mississippi.....	-	1,029	1,126	-	23	22	-	-	-	2	-
WEST SOUTH CENTRAL...	135	24,976	31,164	6	392	324	2	-	2	59	2
Arkansas.....	-	971	1,085	-	35	16	-	-	-	-	-
Louisiana.....	-	99	110	3	146	180	-	-	-	1	-
Oklahoma.....	9	503	210	2	21	20	-	-	-	1	-
Texas.....	126	23,403	29,759	1	190	108	2	-	2	57	2
MOUNTAIN.....	22	12,109	19,982	1	89	87	-	-	-	-	10
Montana.....	3	1,841	3,764	1	5	2	-	-	-	-	1
Idaho.....	4	1,629	2,832	-	5	9	-	-	-	-	2
Wyoming.....	2	170	852	-	6	5	-	-	-	-	-
Colorado.....	-	1,321	5,715	-	48	24	-	-	-	-	-
New Mexico.....	2	1,139	679	-	10	11	-	-	-	-	-
Arizona.....	5	5,317	1,357	-	10	16	-	-	-	-	6
Utah.....	4	645	4,577	-	-	17	-	-	-	-	1
Nevada.....	2	47	206	-	5	3	-	-	-	-	-
PACIFIC.....	183	21,277	27,802	10	579	485	-	-	-	3	77
Washington.....	105	3,921	7,295	3	43	37	-	-	-	2	46
Oregon.....	19	1,868	3,315	-	36	34	-	-	-	-	3
California.....	46	14,793	13,106	7	479	388	-	-	-	1	28
Alaska.....	11	551	190	-	17	18	-	-	-	-	-
Hawaii.....	2	144	3,896	-	4	8	-	-	-	-	-
Puerto Rico.....	51	2,966	2,531	1	15	10	-	-	-	1	-

## Morbidity and Mortality Weekly Report

CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
 FOR WEEKS ENDED  
 OCTOBER 22, 1966 AND OCTOBER 23, 1965 (42nd WEEK) - CONTINUED

AREA	STREPTOCOCCAL SORE THROAT & SCARLET FEVER	TETANUS		TULAREMIA		TYPHOID		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1966	1966	Cum. 1966	1966	Cum. 1966	1966	Cum. 1966	1966	Cum. 1966	1966	Cum. 1966
UNITED STATES...	6,619	7	159	3	139	11	319	-	223	57	3,344
NEW ENGLAND.....	841	-	4	-	1	-	10	-	3	3	79
Maine.....	40	-	-	-	-	-	-	-	-	-	25
New Hampshire.....	26	-	-	-	-	-	-	-	-	1	27
Vermont.....	6	-	-	-	-	-	-	-	-	1	23
Massachusetts.....	168	-	2	-	1	-	6	-	1	1	4
Rhode Island.....	72	-	-	-	-	-	-	-	-	-	-
Connecticut.....	529	-	2	-	-	-	4	-	2	-	-
MIDDLE ATLANTIC.....	178	1	14	-	-	1	53	-	41	1	201
New York City.....	6	-	5	-	-	-	22	-	-	-	1
New York, Up-State.....	142	-	2	-	-	1	12	-	13	1	188
New Jersey.....	NN	-	2	-	-	-	7	-	12	-	-
Pennsylvania.....	30	1	5	-	-	-	12	-	16	-	12
EAST NORTH CENTRAL...	522	1	19	-	18	-	39	-	17	8	439
Ohio.....	28	-	4	-	3	-	19	-	9	-	192
Indiana.....	93	-	4	-	8	-	4	-	-	4	97
Illinois.....	127	1	4	-	6	-	4	-	8	2	63
Michigan.....	176	-	5	-	-	-	6	-	-	1	38
Wisconsin.....	98	-	2	-	1	-	6	-	-	1	49
WEST NORTH CENTRAL...	246	1	12	-	16	1	29	-	4	19	756
Minnesota.....	5	1	3	-	-	-	-	-	-	7	175
Iowa.....	93	-	2	-	-	-	5	-	-	2	147
Missouri.....	5	-	6	-	10	1	14	-	3	3	230
North Dakota.....	104	-	-	-	-	-	1	-	-	2	39
South Dakota.....	11	-	-	-	2	-	-	-	-	4	84
Nebraska.....	-	-	-	-	2	-	2	-	-	-	22
Kansas.....	28	-	1	-	2	-	7	-	1	1	59
SOUTH ATLANTIC.....	1,115	-	32	1	12	6	62	-	107	7	429
Delaware.....	9	-	-	-	-	-	1	-	2	-	-
Maryland.....	217	-	3	1	2	1	10	-	26	-	3
Dist. of Columbia..	-	-	-	-	-	-	2	-	-	-	-
Virginia.....	218	-	6	-	2	-	13	-	31	3	222
West Virginia.....	225	-	-	-	1	-	1	-	-	1	50
North Carolina.....	8	-	4	-	3	-	6	-	27	-	4
South Carolina.....	44	-	2	-	1	2	13	-	5	-	-
Georgia.....	7	-	7	-	3	-	4	-	16	2	93
Florida.....	387	-	10	-	-	3	12	-	-	1	57
EAST SOUTH CENTRAL...	1,064	-	18	1	22	1	41	-	39	5	426
Kentucky.....	21	-	2	-	2	-	10	-	9	1	90
Tennessee.....	858	-	3	-	12	1	20	-	24	4	295
Alabama.....	107	-	7	-	4	-	6	-	6	-	20
Mississippi.....	78	-	6	1	4	-	5	-	-	-	21
WEST SOUTH CENTRAL...	666	3	40	1	61	1	32	-	8	7	678
Arkansas.....	6	-	4	1	47	1	3	-	2	2	78
Louisiana.....	4	1	10	-	3	-	10	-	-	1	43
Oklahoma.....	74	1	3	-	7	-	9	-	5	2	171
Texas.....	582	1	23	-	4	-	10	-	1	2	386
MOUNTAIN.....	1,021	-	2	-	6	-	14	-	3	2	89
Montana.....	81	-	-	-	2	-	-	-	-	-	7
Idaho.....	59	-	-	-	-	-	-	-	-	-	-
Wyoming.....	30	-	-	-	-	-	-	-	-	-	-
Colorado.....	380	-	2	-	-	-	3	-	2	-	18
New Mexico.....	230	-	-	-	1	-	2	-	1	1	14
Arizona.....	89	-	-	-	1	-	4	-	-	1	39
Utah.....	151	-	-	-	2	-	4	-	-	-	3
Nevada.....	1	-	-	-	-	-	1	-	-	-	8
PACIFIC.....	966	1	18	-	3	1	39	-	1	5	247
Washington.....	324	-	-	-	-	-	11	-	-	1	14
Oregon.....	26	-	1	-	-	-	1	-	-	-	4
California.....	574	1	17	-	3	1	25	-	1	4	229
Alaska.....	2	-	-	-	-	-	-	-	-	-	-
Hawaii.....	40	-	-	-	-	-	2	-	-	-	-
Puerto Rico.....	7	1	45	-	-	1	15	-	-	1	17

## Morbidity and Mortality Weekly Report

367

Week No.

DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED OCTOBER 22, 1966

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(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes	Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes
	All Ages	65 years and over				All Ages	65 years and over		
NEW ENGLAND:	694	442	26	28	SOUTH ATLANTIC:	1,216	597	42	103
Boston, Mass.-----	216	135	7	9	Atlanta, Ga.-----	149	60	5	11
Bridgeport, Conn.-----	48	33	3	1	Baltimore, Md.-----	286	132	8	23
Cambridge, Mass.-----	30	19	-	-	Charlotte, N. C.-----	48	25	1	3
Fall River, Mass.-----	20	14	-	2	Jacksonville, Fla.-----	60	36	2	4
Hartford, Conn.-----	58	30	3	6	Miami, Fla.-----	79	39	1	10
Lowell, Mass.-----	17	11	-	-	Norfolk, Va.-----	53	28	6	1
Lynn, Mass.-----	15	10	-	-	Richmond, Va.-----	76	39	2	4
New Bedford, Mass.-----	38	25	2	1	Savannah, Ga.-----	43	16	-	3
New Haven, Conn.-----	47	31	-	2	St. Petersburg, Fla.-----	80	64	2	1
Providence, R. I.-----	75	46	-	3	Tampa, Fla.-----	69	34	7	4
Somerville, Mass.-----	7	5	-	-	Washington, O. C.-----	236	101	7	36
Springfield, Mass.-----	40	28	3	-	Wilmington, Del.-----	37	23	1	3
Waterbury, Conn.-----	15	11	-	-					
Worcester, Mass.-----	68	44	8	4	EAST SOUTH CENTRAL:	637	330	39	54
MIDDLE ATLANTIC:	3,317	1,926	141	163	Birmingham, Ala.-----	97	50	1	3
Albany, N. Y.-----	46	23	1	3	Chattanooga, Tenn.-----	39	18	6	3
Allentown, Pa.-----	35	18	2	-	Knockville, Tenn.-----	24	16	3	-
Buffalo, N. Y.-----	142	81	6	10	Louisville, Ky.-----	158	82	13	8
Camden, N. J.-----	47	31	4	-	Memphis, Tenn.-----	130	67	4	18
Elizabeth, N. J.-----	30	18	4	2	Mobile, Ala.-----	46	21	-	8
Erie, Pa.-----	57	35	3	1	Montgomery, Ala.-----	36	20	4	3
Jersey City, N. J.-----	80	39	6	6	Nashville, Tenn.-----	107	56	8	11
Newark, N. J.-----	106	50	13	5	WEST SOUTH CENTRAL:	1,064	560	38	71
New York City, N. Y.-----	1,708	990	62	76	Austin, Tex.-----	34	21	3	2
Paterson, N. J.-----	46	26	4	5	Baton Rouge, La.-----	26	15	-	1
Philadelphia, Pa.-----	402	239	3	20	Corpus Christi, Tex.-----	27	12	-	1
Pittsburgh, Pa.-----	227	125	6	13	Oallas, Tex.-----	127	64	8	9
Reading, Pa.-----	45	34	4	1	El Paso, Tex.-----	59	31	5	4
Rochester, N. Y.-----	97	66	15	7	Fort Worth, Tex.-----	68	35	2	5
Schenectady, N. Y.-----	21	14	-	-	Houston, Tex.-----	200	89	2	15
Scranton, Pa.-----	52	27	3	2	Little Rock, Ark.-----	46	29	6	3
Syracuse, N. Y.-----	74	43	2	7	New Orleans, La.-----	160	76	2	10
Trenton, N. J.-----	44	23	1	4	Oklahoma City, Okla.-----	96	54	2	5
Utica, N. Y.-----	28	24	1	1	San Antonio, Tex.-----	108	69	2	9
Yonkers, N. Y.-----	30	20	1	-	Shreveport, La.-----	54	30	2	5
					Tulsa, Okla.-----	59	35	4	2
EAST NORTH CENTRAL:	2,644	1,499	97	149	MOUNTAIN:	345	193	13	19
Akron, Ohio-----	80	47	-	8	Albuquerque, N. Mex.-----	34	20	4	-
Canton, Ohio-----	39	24	7	5	Colorado Springs, Colo.-----	19	12	2	2
Chicago, Ill.-----	751	415	32	39	Denver, Colo.-----	114	64	-	7
Cincinnati, Ohio-----	166	100	4	9	Ogden, Utah-----	19	12	1	-
Cleveland, Ohio-----	207	119	2	5	Phoenix, Ariz.-----	41	25	5	2
Columbus, Ohio-----	124	69	-	4	Pueblo, Colo.-----	17	11	-	1
Dayton, Ohio-----	87	50	4	5	Salt Lake City, Utah-----	56	27	-	7
Oetroit, Mich.-----	316	164	12	19	Tucson, Ariz.-----	45	22	1	-
Evansville, Ind.-----	51	31	1	1	PACIFIC:	1,593	942	30	86
Flint, Mich.-----	45	21	3	3	Berkeley, Calif.-----	17	11	-	2
Fort Wayne, Ind.-----	38	22	3	4	Fresno, Calif.-----	53	25	1	5
Gary, Ind.-----	37	22	5	2	Glendale, Calif.*-----	38	27	-	1
Grand Rapids, Mich.-----	51	28	3	7	Honolulu, Hawaii-----	39	15	-	11
Indianapolis, Ind.-----	179	90	4	7	Long Beach, Calif.-----	77	54	1	3
Madison, Wis.-----	39	20	-	1	Los Angeles, Calif.-----	538	321	7	21
Milwaukee, Wis.-----	150	97	2	9	Oakland, Calif.-----	82	41	3	6
Peoria, Ill.-----	46	29	2	3	Pasadena, Calif.-----	24	20	-	-
Rockford, Ill.-----	33	21	4	2	Portland, Oreg.-----	121	65	2	4
South Bend, Ind.-----	48	26	3	10	Sacramento, Calif.-----	60	33	1	3
Toledo, Ohio-----	104	72	5	8	San Oiego, Calif.-----	96	54	3	8
Youngstown, Ohio-----	53	32	1	2	San Francisco, Calif.-----	158	90	6	9
WEST NORTH CENTRAL:	880	547	31	47	San Jose, Calif.*-----	35	22	2	2
Des Moines, Iowa*-----	61	41	2	3	Seattle, Wash.-----	168	99	3	8
Duluth, Minn.-----	27	20	-	1	Spokane, Wash.-----	54	43	1	1
Kansas City, Kans.-----	49	27	4	3	Tacoma, Wash.-----	33	22	-	2
Kansas City, Mo.-----	120	72	3	7	Total	12,390	7,036	457	720
Lincoln, Nebr.-----	21	16	1	-	Cumulative Totals				
Minneapolis, Minn.-----	109	74	1	4	including reported corrections for previous weeks				
Omaha, Nebr.-----	101	78	3	2	All Causes, All Ages -----	526,932			
St. Louis, Mo.-----	274	159	9	16	All Causes, Age 65 and over-----	301,884			
St. Paul, Minn.-----	69	39	1	4	Pneumonia and Influenza, All Ages-----	21,918			
Wichita, Kans.-----	49	21	7	7	All Causes, Under 1 Year of Age-----	28,089			

\*Estimate - based on average percent of divisional total.

# EPIDEMIOLOGIC NOTES AND REPORTS RESPIRATORY DISEASE—Panama and Canal Zone

An outbreak of respiratory illness in the Republic of Panama as well as in the Canal Zone began in early July and continued through the month of August. Complement fixation studies from two cases confirmed a fourfold rise in antibody to influenza A2, but further lab characterization has not yet been accomplished.

A review of the record for numbers of outpatient clinic visits related to upper respiratory illness reveals that peaks in occurrence in the past six years have been associated with isolation of type A or B influenza virus (Table 3).

Table 3  
Upper Respiratory Illnesses Reported to Outpatient Clinics in the Canal Zone—1961-1966

Month	1961	1962	1963	1964	1965	1966
January	175	158	111	129	106	140
February	162	155	131	118	78	118
March	175	138	149	173	121	206
April	134	88	77	155	128	181
May	140	257	139	255	152	144
June	312*	536**	262	304	385*	158
July	146	128	196	260	127	315
August	146	103	205	253	101	359*
						(through Aug. 22)
September	142	125	188†	231	104	
October	205	216	270	260	193	
November	138	357	181	261	207	
December	193	255	105	189	196	

\*Type A influenza isolated during epidemics of upper respiratory illness.

\*\*Type B influenza isolated during epidemic of upper respiratory illness.

†Isolation of Type A influenza made during a localized outbreak of respiratory illness among a group of soldiers.

(Reported by the Division of Preventive Medicine, Canal Zone, Sidney B. Clark, M.D., Chief, Andries de Boer, M.D., Epidemiologist, and an EIS Officer assigned to the Zone.)

## Editorial Note:

The seasonal distribution of the recent outbreak is in keeping with past experience in this geographical region where influenza generally occurs near the onset of the heavy rainfall months (May or June).

THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULATION OF 15,600, IS PUBLISHED AT THE COMMUNICABLE DISEASE CENTER, ATLANTA, GEORGIA

CHIEF, COMMUNICABLE DISEASE CENTER  
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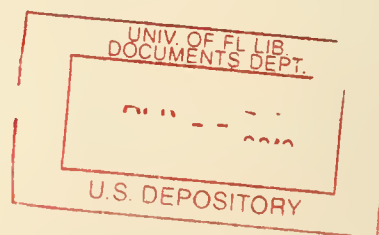
DAVID J. SENCER, M.D.  
A.O. LANGMUIR, M.D.  
JOA L. SHERMAN, M.S.

IN ADDITION TO THE ESTABLISHED PROCEDURES FOR REPORTING MORBIDITY AND MORTALITY, THE COMMUNICABLE DISEASE CENTER WELCOMES ACCOUNTS OF INTERESTING OUTBREAKS OR CASE INVESTIGATIONS WHICH ARE OF CURRENT INTEREST TO HEALTH OFFICIALS AND WHICH ARE DIRECTLY RELATED TO THE CONTROL OF COMMUNICABLE DISEASES. SUCH COMMUNICATIONS SHOULD BE ADDRESSED TO:

THE EDITOR  
MORBIDITY AND MORTALITY WEEKLY REPORT  
COMMUNICABLE DISEASE CENTER  
ATLANTA, GEORGIA 30333

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE CDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES ON SATURDAY; COMPILED DATA ON A NATIONAL BASIS ARE RELEASED ON THE FOLLOWING FRIDAY.

U. S. DEPARTMENT OF  
HEALTH, EDUCATION, AND WELFARE  
PUBLIC HEALTH SERVICE  
Communicable Disease Center  
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